

NATIONAL INSTITUTES OF HEALTH
WARREN GRANT MAGNUSON CLINICAL CENTER
NURSING DEPARTMENT

Standards of Practice: **Care of the Patient Undergoing Myelography Using Water-Soluble Contrast Media**

I. Assessment

A. Pre-Procedure

1. Ensure adequate hydration prior to the procedure.
2. Temperature, pulse, respirations, blood pressure, neurological, respiratory, and circulatory assessment.
3. History of allergies and / or sensitivity to iodine or shellfish products or other contrast media. Assess patient need for pre-procedure medications if allergy exists.
4. Need for indwelling urinary drainage catheter.
5. Patient understanding of procedure and post procedure care.
6. Informed consent on chart.

B. Post-Procedure

1. Monitor and document the following on return from the procedure, then every 4 hours x 2, and then every 8 hours for 48 hours.
 - a. Temperature, pulse, respirations, and blood pressure.
 - b. Level of consciousness and mental status
 - c. Pupil size and reaction.
 - d. Extraocular movements.
 - e. Motor strength and sensation in extremities.
 - f. Puncture site for any swelling, pain, tenderness, bleeding, or hematoma.
2. Monitor urinary function:
 - a. Voids within 8 hours of procedure or urinary catheter removal.
 - b. Assess for urinary retention.

II. Interventions

A. Pre-Procedure

1. Complete *Pre-Procedure Checklist*.
2. Ensure hydration.
3. Patient may take fluids up to 4 hours prior to the procedure.

B. Post-procedure

1. Elevate head of bed and stretcher 30 to 45 degrees at all times or per prescriber orders.
2. Patients may be required to lie in a horizontal flat position following a myelogram if this is required by certain protocols. Physician orders should reflect head and body position following these selective studies.
3. Movement onto stretcher, and off the stretcher to bed, should be done slowly with patient completely passive, maintaining head up position.

4. Instruct patient to remain in bed, in head up position for the first 6 hours.
5. Bathroom privileges permitted if patient is stable and assisted.
6. Do not administer antinauseants of the phenothiazine class (Promethazine, Thiethylperazine, Chlorpromazine, Perphenazine, Prochlorperazine) to treat post procedural nausea or vomiting.
7. Resume diet and encourage oral intake of fluids up to 2 liters, if tolerated. (Unless contraindicated). Children's fluid intake needs will be determined by the *Pediatric Fluid Worksheet*. Children need to be alert and fully awake before resuming oral intake.
8. Instruct patient regarding post procedure plan of care.
9. Notify physician immediately of any complications.

III. Documentation

The following will be documented in the MIS or the Critical Care Flow Sheet:

- A. Pre and post procedure assessments.
- B. Pre and post procedure nursing interventions.
- C. Patient response to procedure.
- D. Intake and output post procedure

IV. REFERENCES:

1. Barker, E. (1994). Neuroscience Nursing. St. Louis: Mosby
2. Hickey, J. (1997). The clinical practice of neurological and neurosurgical nursing (4th ed.). Philadelphia: J.B. Lippincott.
3. Kozier, B., Blais, K., Johnson, J.Y., & Temple, J.S. (1993). Special studies. In B. Kozier, G. Erb, K. Blais, J.Y. Johnson, & J.S. Temple (Eds.), Techniques in clinical nursing. (4th ed., pp. 368 - 372). Redwood City, California: Addison-Wesley.
4. Bracco Diagnostics (1997). Manufacture's insert: Isovue-M 200 and Isovue-M 300. New Brunswick, N. J.: E. R. Squibb & Sons, Inc.
5. NIH Clinical Center Diagnostic Radiology Department. (1998). Verbal and written communication from the Interventional neuroradiology medical and nursing staff. Bethesda, MD: National Institutes of Health.

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